Israel Biophysical Society Meeting
15 January 2019 / Tel Aviv University

8:30-9:15 Registration + Coffee
9:15-9:30 Welcome words

Joint session 1 (Lev): Chair, Roy Beck
09:30 - 10:00 Elisha Hass (BIU): The protein folding mechanism: bottom-up or top-down?
10:00 - 10:30 Keynote: Gijsje Koenderink (AMOLF): Living in a mechanical world
10:30 - 11:00 Coffee break

Parallel session 1: Extra-Cellular Matter (Melamed): Chair, Yair Shokef
11:00 - 11:30 Ayelet Lesman (TAU): Mechanical aspects of fibrous networks embedded with contractile cells
11:30 - 12:00 Liraz Chai (HUJI): Zooming into the extracellular matrix of a bacterial biofilm

Parallel session 2: Active Living Matter (Lev): Chair, Yoav Lahini
11:00 - 11:30 Nir Gov (WIS): Pair formation in insect swarms driven by adaptive long-range interactions
11:30 - 12:00 Ofer Feinerman (WIS): Regulation of collective food flows in ant colonies

12:00 - 14:00 Lunch + Poster session

Parallel session 3 – Cell Population Dynamics (Melamed): Chair, Yasmine Meroz
14:00 - 14:30 Naama Brenner (IIT): Testing for ergodicity in dividing cell populations
14:30 - 15:00 Rami Pugatch (BGU): Self-assembly of ribosomes leads to overlapping reproduction cycles and increase growth rate
15:00 - 15:15 Amir Porat (TAU): Dynamics of interacting growth-driven systems inspired by plant tropisms
15:15 - 15:30 Yuval Edri (BGU): Shaping the asymmetry of localized frequency-locking waves by a generalized forcing and implications to the inner ear

Parallel session 4: From Single Molecule to Cell Dynamics (Lev): Chair, Shlomi Reuveni
14:00 - 14:30 Ronen Zaidel-Bar (TAU): New insights into the assembly, structure and function of cadherin-mediated adhesions
14:30 - 15:00 Ronen Berkovich (BGU): The dynamics of single proteins under force
15:00 - 15:15 Amnon Buxboim (HUJI): Evaluating embryo developmental potential based on deep learning of time-lapse imaging and real-time rheology
15:15 - 15:30 Raya Sorkin (TAU): Membrane binding, bending and remodeling by calcium sensor proteins

15:30 - 16:00 Coffee break

Joint session 2 (Lev): Chair, Yael Roichman
16:00 - 16:30 Eran Sharon (HUJI): Quantification of shape and shape fluctuations of self-assembled chiral peptide nano-ribbons using incompatible elasticity theory
16:30 - 17:00 Ariel Kaplan (IIT): Under the hood of a cellular supercar: DNA unwinding by RecBCD
17:00 - 17:30 Yuval Garini (BIU): DNA Origami structures for biophysical and in vivo applications

17:30 - 17:45 Goodbye words